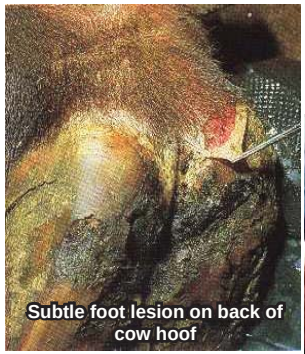
Protect California's Livestock Industry

Livestock producers and their veterinarians may be the first to suspect a foreign animal disease based on compatible signs. Oral lesions in livestock may be caused by infectious agents or feed related mechanical trauma. All suspicious cases should be reported and investigated as a potential FAD. A delay in reporting may result in significant spread of disease.

To protect California livestock industries from FMD:

- Promptly report any compatible clinical signs observed in your animals to a State or Federal animal health official or your veterinarian
- Implement and maintain farm biosecurity practices
- Feed only cooked food waste to pigs
- Avoid visiting U.S. livestock facilities for a minimum of five days after visiting livestock facilities in foreign countries
- Consult your veterinarian or local animal health official for specific biosecurity recommendations for foreign travelers or visitors.



Subtle foot lesion on back of cow hoof

Severe oral lesions on cow tongue

California Department of Food and Agriculture

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Sacramento, CA 95814

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http://www.cdfa.ca.gov/ahfss/ah/fmd_info.

United States Department of Agriculture
Animal and Plant Health Inspection
Veterinary Services
10365 Old Placerville Road, Suite 210
Sacramento, CA 95827

Sacramento	(916) 854-3900
Toll Free	(877) 741-3690

http://www.aphis.usda.gov/animal_health/

Painful oral lesions cause drooling

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CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE

Animal Health and Food Safety Services
Animal Health Branch

Foot and Mouth Disease

Guide for Producers

June 2007

Introduction

Foot and Mouth Disease (FMD) is a highly contagious viral disease that infects cattle, swine, sheep, goats and other cloven-hoofed animals. FMD is considered a foreign animal disease. The U.S. has had outbreaks of FMD; the last occurred in California in 1929. The disease is widespread in much of the world. Asia, Africa, Europe, the Middle East and South America have experienced re-occurring FMD outbreaks over the past several years.

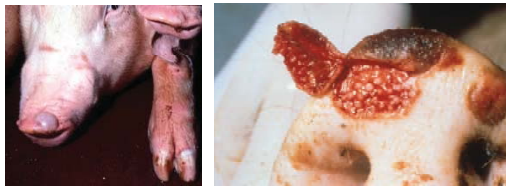
The detection of FMD has immediate and severe implications to domestic and international trade. The painful lesions associated with the disease create serious animal welfare concerns. FMD is one of the most feared animal diseases worldwide. Awareness and early detection of this disease are critical.

Transmission

The FMD virus spreads to susceptible animals by direct contact with infected animals and their secretions and excretions. Airborne spread is possible for up to 40 miles over land and 180 miles over water.

Susceptible animals may be exposed to FMD by:

- Addition of infected animals to a herd or flock
- Contact with contaminated facilities or equipment
- Contact with humans wearing contaminated clothing or footwear
- Exposure to contaminated water, hay, feedstuffs, hides or pharmaceuticals
- Feeding pigs raw or improperly cooked garbage containing FMD-infected animal meat or meat products.



Vesicles on pig snouts

Disease Development

Susceptible animals exposed to FMD develop signs of illness in 3-5 days (range: 2-14 days). Clinical signs may vary with the species affected and the viral strain involved. Virus is present in all excretions and secretions of infected animals. Virus may be present in milk and semen up to 4 days before clinical signs appear. Cattle may recover from FMD, but may become carriers of the disease for 6-42 months.

Clinical Signs in Cattle:

- Fluid filled vesicles of the mouth, nostrils, muzzle or teats
- Drooling, lip smacking, teeth grinding
- Hoof lesions: vesicles on coronary band and between the digits
- Lameness, reluctance to move
- Lack of appetite
- Fever
- Decreased milk production.

Sheep dental pad with erosion

Clinical Signs in Sheep and Goats

- Lesions similar to cattle, but often less apparent
- Erosions on dental pad from ruptured vesicles
- Redness of coronary band, with or without vesicles.

Clinical Signs in Pigs:

- Lameness
- Foot lesions: vesicles on coronary band, heels and digits
- Vesicles and open sores on snout
- Oral lesions less commonly seen.

Pig foot lesions

Report Clinical Signs

If you observe clinical signs compatible with FMD, promptly notify State or Federal animal health officials and your private veterinarian. A Foreign Animal Disease Diagnostician (FADD) will be sent to assess the situation. A FADD obtains a thorough history and physical examination of animals. Samples of blood, vesicular fluid and tissues will be collected and transported to the laboratory. If FMD is suspected, procedures to contain and prevent the spread of the disease are implemented. Other diseases, which may show clinical signs similar to FMD, include vesicular stomatitis, bovine viral diarrhea, bluetongue, and infectious bovine rhinotracheitis. Prompt accurate assessment and appropriate diagnostic testing are essential to differentiate FMD from other diseases.

Ruptured vesicle between digits of cow foot

Consequences

FMD outbreaks are devastating to animal production, animal industries, the economy and international trade. If FMD is diagnosed, severe trade restrictions, including a ban on export of all cloven-hoofed animals and their products, are inevitable.

Emergency response measures will likely include:

- Strict quarantine, biocontainment and biosecurity of infected premises
- Depopulation of animals on FMD-infected premises; prompt destruction and appropriate disposal of carcasses and contact materials
- Movement restrictions on animals and their products
- Closure of livestock markets
- Immediate trace in and out of infected premises
- Thorough cleaning and disinfection of all infected premises, followed by 30 day vacancy.